Jos M Ponce-Ortega

List of Publications by Year in Descending Order

286 papers	4,782 citations	36 h-index	53 g-index
300 ext. papers	5,400 ext. citations	4.8 avg, IF	6.26 L-index

#	Paper	IF	Citations
286	Multi-generation System Optimization Compromising Water-Energy-Environment Nexus. *Green Energy and Technology*, **2022**, 171-200	0.6	
285	Strategic Planning for Optimal Management of Different Types of Shale Gas Wastewater. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1451-1470	8.3	1
284	Optimizing resilience at water-energy-food nexus. *Computers and Chemical Engineering*, **2022**, 160, 107710	4	0
283	Involving behavior of population in the strategic planning of integrated energy systems. *Computers and Chemical Engineering*, **2022**, 157, 107583	4	1
282	Multiobjective optimization of the supply chain for the production of biomass-based fuels and high-value added products in Mexico. *Computers and Chemical Engineering*, **2022**, 157, 107598	4	0
281	Marginalization index as social measure for Acetone-Butanol-Ethanol supply chain planning. *Renewable and Sustainable Energy Reviews*, **2022**, 154, 111816	16.2	1
280	Incorporating the occupational health in the optimization for the methanol process. *Journal of Loss Prevention in the Process Industries*, **2022**, 74, 104660	3.5	0
279	Management of renewable energy sources **2022**, 3-31		0
278	Incorporating machine learning for thermal engines modeling in industrial waste heat recovery. *Chemical Engineering Research and Design*, **2022**, 181, 239-252	5.5	0
277	An optimization approach to increase the human development index through a biogas supply chain in a developing region. *Renewable Energy*, **2022**, 190, 347-357	8.1	0
276	Optimal design of a solar-grade silicon refinery incorporating a fairness approach. *Chemical Engineering Research and Design*, **2022**, 182, 25-36	5.5	
275	A water-energy-food security nexus framework based on optimal resource allocation. *Environmental Science and Policy*, **2022**, 133, 1-16	6.2	1
274	Optimal waste management during the COVID-19 pandemic.. *Chemical Engineering and Processing: Process Intensification*, **2022**, 176, 108942	3.7	1
273	Intensification 4.0 of hydraulic fracturing process involving incentive schemes and the use of matching law. *Chemical Engineering and Processing: Process Intensification*, **2022**, 108968	3.7	0
272	Optimal Profit Distribution in Interplant Waste Heat Integration through a Hybrid Approach. *Energy* , **2022**, 253, 124001	7.9	0
271	Social impact assessment in designing supply chains for biorefineries **2022**, 405-426		
270	Modeling and optimization of supply chains: Applications to conventional and intensified biorefineries **2022**, 361-388		0

269	Implementing genetic algorithms for optimizing integrated oil production systems. *Brazilian Journal of Chemical Engineering*, **2021**, 38, 929	1.7	
268	Strategic Planning of an Integrated Fuel Production System with a Fair-Sustainable Approach. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 5116-5127	8.3	1
267	Multi-objective Optimization Approach to Meet Water, Energy, and Food Needs in an Arid Region Involving Security Assessment. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 4771-4790	8.3	4
266	Optimal Design of Water Networks in Eco-Industrial Parks Incorporating a Fairness Approach. *Industrial & Engineering Chemistry Research*, **2021**, 60, 8844-8860	3.9	4
265	Use of metakaolin or coal gangue as a partial substitution of cement in mechanical performance of PC mortars. *European Journal of Environmental and Civil Engineering*, **2021**, 25, 502-515	1.5	2
264	Involving resilience in optimizing the water-energy-food nexus at macroscopic level. *Chemical Engineering Research and Design*, **2021**, 147, 259-273	5.5	10
263	Incorporating a seawater desalination scheme in the optimal water use in agricultural activities. *Agricultural Water Management*, **2021**, 244, 106552	5.9	5
262	Optimization of the supply chain for the production of biomass-based fuels and high-added value products in Mexico. *Computers and Chemical Engineering*, **2021**, 145, 107181	4	4
261	Optimal and Fair Distribution of Water Under Water Scarcity Scenarios at a Macroscopic Level. *International Journal of Environmental Research*, **2021**, 15, 57-77	2.9	1
260	Optimization Strategies for Integrating and Intensifying Housing Complexes **2021**, 285-300		
259	Sustainable assessment of Water-Energy-Food Nexus at regional level through a multi-stakeholder optimization approach. *Journal of Cleaner Production*, **2021**, 290, 125194	10.3	12
258	Planning of intensified production of solar grade silicon to yield solar panels involving behavior of population. *Chemical Engineering and Processing: Process Intensification*, **2021**, 161, 108241	3.7	2
257	Involving Resilience in Synthesizing Food Networks in Low-Income Communities. *Process Integration and Optimization for Sustainability*, **2021**, 5, 139-157	2	2
256	Multi-objective optimization of the supply chain for the production of biofuels and high value-added products in Mexico: importance of the water footprint. *Computer Aided Chemical Engineering*, **2021**, 7-12	0.6	
255	A Coordinated Framework for the Optimization of Municipal Solid Waste Management. *Computer Aided Chemical Engineering*, **2021**, 50, 1409-1414	0.6	
254	Optimal Supply Chain for Renewable Furfural Production Involving Economic, Environmental and Social Criteria. *Computer Aided Chemical Engineering*, **2021**, 50, 1395-1401	0.6	
253	Multi-objective Optimization Approach Based on Deterministic and Metaheuristic Techniques to Resource Management in Health Crisis Scenarios Under Uncertainty. *Process Integration and Optimization for Sustainability*, **2021**, 5, 429-443	2	3
252	Planning production of solar grade silicon to yield solar panels involving behaviour of population. *Computer Aided Chemical Engineering*, **2021**, 50, 1701-1706	0.6	

251	A Hybrid MetaheuristicDeterministic Optimization Strategy for Waste Heat Recovery in Industrial Plants. *Industrial & Engineering Chemistry Research*, **2021**, 60, 3711-3722	3.9	4
250	Sustainable Energy Transition Considering the WaterEnergy Nexus: A Multiobjective Optimization Framework. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3768-3780	8.3	4
249	Sustainable energy transition: modeling and optimization. *Current Opinion in Chemical Engineering*, **2021**, 31, 100661	5.4	5
248	The integration of pelletized agricultural residues into electricity grid: Perspectives from the human, environmental and economic aspects. *Journal of Cleaner Production*, **2021**, 321, 128932	10.3	0
247	Stochastic optimization of the water-energy-food nexus in disadvantaged rural communities to achieve the sustainable development goals. *Sustainable Production and Consumption*, **2021**, 28, 1249-1261	8.2	5
246	Fair Allocation of Potential COVID-19 Vaccines Using an Optimization-Based Strategy. *Process Integration and Optimization for Sustainability*, **2021**, 5, 3-12	2	9
245	Inherent occupational health hazards in the production of solar grade silicon. *Chemical Engineering Research and Design*, **2020**, 142, 285-294	5.5	3
244	Simultaneous structural and operating optimization of process flowsheets combining process simulators and metaheuristic techniques: The case of solar-grade silicon process. *Computers and Chemical Engineering*, **2020**, 140, 106946	4	5
243	Optimization Approach to Identify Fair Solutions in the Synthesis of Carbon, Hydrogen, and Oxygen Symbiosis Networks. *Industrial & Engineering Chemistry Research*, **2020**, 59, 5985-5995	3.9	7
242	Optimal crop allocation including market trends and water availability. *European Journal of Operational Research*, **2020**, 285, 728-739	5.6	4
241	Structural and Operating Optimization of the Methanol Process Using a Metaheuristic Technique. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 3135-3150	8.3	11
240	Synthesis and Sustainability Evaluation of a Lignocellulosic Multifeedstock Biorefinery Considering Technical Performance Indicators. *ACS Omega*, **2020**, 5, 9259-9275	3.9	20
239	Carbon Policies for Reducing Emissions in Power Plants through an Optimization Framework **2020**, 119-131		
238	Water impact of an optimal natural gas production and distribution system: An MILP model and the case-study of Mexico. *Chemical Engineering Research and Design*, **2020**, 153, 887-906	5.5	3
237	Involving economic incentives in optimizing the methanol supply chain considering conventional and unconventional resources. *Applied Thermal Engineering*, **2020**, 166, 114622	5.8	6
236	Supply chain optimization for the production of biofuels and bioproducts from lignocellulosic biomass in Mexico. *Computer Aided Chemical Engineering*, **2020**, 48, 1339-1344	0.6	2
235	Identifying Fair Solutions in the Optimal Design of Integrated Residential Complexes. *Chemical Engineering and Processing: Process Intensification*, **2020**, 157, 108116	3.7	4
234	Optimization of municipal solid waste management using a coordinated framework. *Waste Management*, **2020**, 115, 15-24	8.6	4

233	Optimal Planning for Satisfying Future Electricity Demands Involving Simultaneously Economic, Emissions, and Water Concerns. *Process Integration and Optimization for Sustainability*, **2020**, 4, 379-389	2	7
232	Hybrid Multiobjective Optimization Using Deterministic and Metaheuristic Techniques for Flowback Water Reusing in Hydraulic Fracturing Processes. *Industrial & Engineering Chemistry Research*, **2020**, 59, 15298-15308	3.9	6
231	Water, energy, and food security assessment in regions with semiarid climates. *Clean Technologies and Environmental Policy*, **2020**, 22, 2145-2161	4.3	5
230	Optimization of the integrated power and desalination plant with algal cultivation system compromising the energy-water-environment nexus. *Sustainable Energy Technologies and Assessments*, **2020**, 42, 100879	4.7	7
229	Systematic Approach for Assessing the Water□Energy□Food Nexus for Sustainable Development in Regions with Resource Scarcities. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 13734-13748	8.3	11
228	Systems-Level Analysis of Phosphorus Flows in the Dairy Supply Chain. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 17074-17087	8.3	3
227	Economic and Environmental Assessment of Gas Supply Chains Incorporating Shale Gas. *Industrial & Engineering Chemistry Research*, **2019**, 58, 19122-19134	3.9	3
226	Strategic planning to improve the Human Development Index in disenfranchised communities through satisfying food, water and energy needs. *Food and Bioproducts Processing*, **2019**, 117, 14-29	4.9	14
225	A Multi-Objective Optimization Approach for Water□Energy□Food Grids in Isolated Communities. *Process Integration and Optimization for Sustainability*, **2019**, 3, 471-485	2	0
224	Optimal integration of organic Rankine cycle and desalination systems with industrial processes: Energy-water-environment nexus. *Applied Thermal Engineering*, **2019**, 158, 113740	5.8	15
223	Integrated utility pricing and design of water-energy rural off-grid systems. *Energy*, **2019**, 177, 511-529	7.9	11
222	Mixed-Integer Dynamic Optimization for Planning Distributed Biorefineries **2019**, 219-257		
221	Optimal Planning and Site Selection for Distributed Multiproduct Biorefineries Involving Economic, Environmental, and Social Objectives **2019**, 29-77		
220	Optimization of the Supply Chain Associated to the Production of Bioethanol From Residues of Agave From the Tequila Process in Mexico **2019**, 115-146		
219	Stochastic Design of Biorefinery Supply Chains Considering Economic and Environmental Objectives **2019**, 177-217		
218	Optimization of Microalgae-to-Biodiesel Production Process Using a Metaheuristic Technique. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 8490-8498	8.3	15
217	Environmental impact and occupational hazard evaluation on intensified processes to produce diphenyl carbonate. *Computers and Chemical Engineering*, **2019**, 122, 19-30	4	5
216	Strategic planning for the use of waste biomass pellets in Mexican power plants. *Renewable Energy*, **2019**, 130, 622-632	8.1	24

215	Integrating Mass and Energy through the Anchor-Tenant Approach for the Synthesis of Carbon-Hydrogen-Oxygen Symbiosis Networks. *Industrial & Engineering Chemistry Research*, **2019**, 58, 16761-16776	3.9	12
214	MINLP Approach for Mosquito-Borne Disease Control through Optimal Fumigation Policies. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 12789-12798	8.3	
213	Involving the Water-Energy-Food Nexus in Integrating Low-Income and Isolated Communities. *Computer Aided Chemical Engineering*, **2019**, 46, 427-432	0.6	
212	Fairness-guided design of water distribution networks for agricultural lands. *Computers and Chemical Engineering*, **2019**, 130, 106547	4	13
211	Carbon Price Evaluation in Power Systems for Flaring Mitigation. *Journal of Sustainable Development of Energy, Water and Environment Systems*, **2019**, 7, 716-729	1.9	3
210	Process Simulators **2019**, 5-25		
209	Optimization of Industrial Process 1 **2019**, 79-90		
208	Metaheuristic Optimization Programs **2019**, 27-51		
207	Interlinking Between Process Simulators and Optimization Programs **2019**, 53-73		
206	Optimization of biofuel supply chain design via a water-energy-food nexus framework. *Computer Aided Chemical Engineering*, **2019**, 46, 1567-1572	0.6	
205	Sustainable Strategic Planning for a National Natural Gas Energy System Accounting for Unconventional Sources. *Computer Aided Chemical Engineering*, **2019**, 46, 1003-1008	0.6	
204	Optimization of Process Flowsheets through Metaheuristic Techniques **2019**,		7
203	Energy Model for Long-Term Scenarios in Power Sector under Energy Transition Laws. *Processes*, **2019**, 7, 674	2.9	1
202	Effective Use of Carbon Pricing on Climate Change Mitigation Projects: Analysis of the Biogas Supply Chain to Substitute Liquefied-Petroleum Gas in Mexico. *Processes*, **2019**, 7, 668	2.9	9
201	Optimal sustainable water-Energy storage strategies for off-grid systems in low-income communities. *Computers and Chemical Engineering*, **2019**, 123, 87-109	4	9
200	Evaluation of carbon and water policies in the optimization of water distribution networks involving power-desalination plants. *Applied Energy*, **2019**, 236, 927-936	10.7	8
199	Sustainable strategic planning for a national natural gas energy system accounting for unconventional sources. *Energy Conversion and Management*, **2019**, 181, 382-397	10.6	8
198	Optimal Design of Sustainable Agricultural Water Networks. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 440-457	8.3	6

197	Inherently Safer Design and Optimization of Intensified Separation Processes for Furfural Production. *Industrial & Engineering Chemistry Research*, **2019**, 58, 6105-6120	3.9	31
196	Involving Acceptability in the Optimal Synthesis of Water Networks in Eco-Industrial Parks. *Industrial & Engineering Chemistry Research*, **2019**, 58, 2268-2279	3.9	12
195	A Disjunctive Programming Approach for Optimizing Carbon, Hydrogen, and Oxygen Symbiosis Networks. *Process Integration and Optimization for Sustainability*, **2019**, 3, 199-212	2	11
194	A multi-objective optimization approach for sustainable water management for places with over-exploited water resources. *Computers and Chemical Engineering*, **2019**, 121, 158-173	4	13
193	Involving the Water–Energy–Food Nexus in Integrating Low-Income and Isolated Communities. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 1399-1418	8.3	11
192	Synthesis of mass exchange networks: A novel mathematical programming approach. *Computers and Chemical Engineering*, **2018**, 115, 226-232	4	7
191	Optimal production of power from mid-temperature geothermal sources: Scale and safety issues. *Energy Conversion and Management*, **2018**, 165, 172-182	10.6	12
190	Analysis of Carbon Policies in the Optimal Integration of Power Plants Involving Chemical Looping Combustion with Algal Cultivation Systems. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 5248-5264	8.3	5
189	Thermo-economic-environmental optimization of a liquid separation condensation-based organic Rankine cycle driven by waste heat. *Journal of Cleaner Production*, **2018**, 184, 198-210	10.3	32
188	Use of Nonlinear Membership Functions and the Water Stress Index for the Environmentally Conscious Management of Urban Water Systems: Application to the City of Morelia. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7752-7760	8.3	2
187	Involving Acceptability in the Optimal Design of Total Integrated Residential Complexes Involving the Water-Energy-Waste Nexus. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 7390-7402	8.3	7
186	Valuation of Water and Emissions in Energy Systems. *Applied Energy*, **2018**, 210, 518-528	10.7	21
185	Optimization of biofuels production via a water–energy–food nexus framework. *Clean Technologies and Environmental Policy*, **2018**, 20, 1443-1466	4.3	30
184	Balancing stakeholder priorities in the operation of combined heat and power systems. *Applied Thermal Engineering*, **2018**, 128, 480-488	5.8	16
183	Analysis of the financial risk under uncertainty in the municipal solid waste management involving multiple stakeholders. *Computers and Chemical Engineering*, **2018**, 117, 433-450	4	11
182	A Multi-Stakeholder Optimization of Food Supply Chains: an Undernourishment Reduction Strategy. *Process Integration and Optimization for Sustainability*, **2018**, 2, 239-257	2	4
181	Optimization of Water Grid at Macroscopic Level Analyzing Water–Energy–Food Nexus. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 12140-12152	8.3	21
180	Synthesis of Water Distribution Networks through a Multi-Stakeholder Approach. *Computer Aided Chemical Engineering*, **2018**, 44, 1717-1722	0.6	

179	A Multistakeholder Approach for the Optimal Planning of Sustainable Energy Systems. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 9451-9460	8.3	9
178	Perspectives for Implementing Distributed Generation in Developing Countries through Modeling Techniques. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 1022-1038	8.3	9
177	Water, food and power grid optimization at macroscopic level involving multi-stakeholder approach. *Energy Procedia*, **2018**, 153, 347-352	2.3	7
176	Optimal design of water networks for shale gas hydraulic fracturing including economic and environmental criteria. *Clean Technologies and Environmental Policy*, **2018**, 20, 2311-2332	4.3	7
175	Scalable Solution Strategies for Chance-Constrained Nonlinear Programs. *Industrial & Engineering Chemistry Research*, **2018**, 57, 7987-7998	3.9	3
174	Synthesis and dual-objective optimization of industrial combined heat and power plants compromising the water□energy nexus. *Applied Energy*, **2018**, 224, 448-468	10.7	15
173	Optimal design of total integrated residential complexes involving water-energy-waste nexus. *Clean Technologies and Environmental Policy*, **2018**, 20, 1061-1085	4.3	13
172	Optimal location of biorefineries considering sustainable integration with the environment. *Renewable Energy*, **2017**, 100, 65-77	8.1	30
171	Mixed Integer Nonlinear Programming Model for Sustainable Water Management in Macroscopic Systems: Integrating Optimal Resource Management to the Synthesis of Distributed Treatment Systems. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2129-2145	8.3	10
170	Optimal Design of Water Desalination Systems Involving Waste Heat Recovery. *Industrial & Engineering Chemistry Research*, **2017**, 56, 1834-1847	3.9	19
169	Optimal Design of Energy Systems Involving Pollution Trading through Forest Plantations. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2585-2604	8.3	15
168	Optimal planning for the supply chain of biofuels for aviation in Mexico. *Clean Technologies and Environmental Policy*, **2017**, 19, 1387-1402	4.3	15
167	Analysis of Carbon Policies in the Optimal Design of Domestic Cogeneration Systems Involving Biogas Consumption. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 4429-4442	8.3	13
166	Thermo-economic analysis and optimization of a zoetropic fluid organic Rankine cycle with liquid-vapor separation during condensation. *Energy Conversion and Management*, **2017**, 148, 517-532	10.6	21
165	Involving Environmental Assessment in the Optimal Design of Domestic Cogeneration Systems. *Process Integration and Optimization for Sustainability*, **2017**, 1, 15-32	2	5
164	Optimal Design of Cogeneration Systems To Use Uncertain Flare Streams. *Industrial & Engineering Chemistry Research*, **2017**, 56, 7049-7061	3.9	1
163	Defining priorities in the design of power and water distribution networks. *Energy*, **2017**, 137, 1026-1040	7.9	12
162	Optimal Planning of Feedstock for Butanol Production Considering Economic and Environmental Aspects. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 4018-4030	8.3	30

161	Optimal water management in macroscopic systems under economic penalty scenarios. *AICHE Journal*, **2017**, 63, 3419-3441	3.6	1
160	Intensification for the Silane Production Involving Economic and Safety Objectives. *Industrial & Engineering Chemistry Research*, **2017**, 56, 261-269	3.9	5
159	Strategic Planning for the Supply Chain of Aviation Biofuel with Consideration of Hydrogen Production. *Industrial & Engineering Chemistry Research*, **2017**, 56, 13812-13830	3.9	12
158	Strategic Planning for Managing Municipal Solid Wastes with Consideration of Multiple Stakeholders. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 10744-10762	8.3	22
157	Dynamic Optimization and Control Strategy for the Planning of a Waste Management System involving Multiple Cities. *Computer Aided Chemical Engineering*, **2017**, 40, 1291-1296	0.6	
156	Optimal Design of Cogeneration Systems Based on Flaring and Venting Streams and Accounting for the Involved Uncertainty. *Computer Aided Chemical Engineering*, **2017**, 40, 937-942	0.6	
155	Sustainable Optimization of Food Networks in Disenfranchised Communities. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 8895-8907	8.3	6
154	Environmental, Technical, and Economic Evaluation of a New Treatment for Wastewater from Slaughterhouses. *International Journal of Environmental Research*, **2017**, 11, 535-545	2.9	6
153	Optimal design of energy and water supply systems for low-income communities involving multiple-objectives. *Energy Conversion and Management*, **2017**, 151, 43-52	10.6	18
152	A multi-objective optimization approach for the selection of working fluids of geothermal facilities: Economic, environmental and social aspects. *Journal of Environmental Management*, **2017**, 203, 962-972	7.9	27
151	Dynamic optimization for the planning of a waste management system involving multiple cities. *Journal of Cleaner Production*, **2017**, 165, 190-203	10.3	14
150	Optimal Planning for Sustainable Production of Avocado in Mexico. *Process Integration and Optimization for Sustainability*, **2017**, 1, 109-120	2	4
149	Optimal Planning of Infrastructure for the Supply Chain of Shale Gas **2017**, 3-19		2
148	Optimal Design of Multiplant Cogeneration Systems with Uncertain Flaring and Venting. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 675-688	8.3	14
147	Optimization of the production of syngas from shale gas with economic and safety considerations. *Applied Thermal Engineering*, **2017**, 110, 678-685	5.8	47
146	Mathematical optimization of a supply chain for the production of fuel pellets from residual biomass. *Clean Technologies and Environmental Policy*, **2017**, 19, 721-734	4.3	9
145	An optimization approach for the sustainable water management at macroscopic level accounting for the surrounding watershed. *Clean Technologies and Environmental Policy*, **2017**, 19, 823-844	4.3	2
144	Optimal Design of Water Distribution Networks with Incorporation of Uncertainties and Energy Nexus. *Process Integration and Optimization for Sustainability*, **2017**, 1, 275-292	2	8

143	Optimal Coupling of Demand Patterns for Improving the Performance of CHP Systems. *Computer Aided Chemical Engineering*, **2017**, 1909-1914	0.6	1
142	Optimal planning of energy production involving carbon capture systems through a multi-stakeholder scheme. *Computer Aided Chemical Engineering*, **2017**, 40, 1315-1320	0.6	
141	Economic and environmental optimization of the biobutanol purification process. *Clean Technologies and Environmental Policy*, **2016**, 18, 395-411	4.3	22
140	Optimal design of integrated agricultural water networks. *Computers and Chemical Engineering*, **2016**, 84, 63-82	4	12
139	Multiobjective Optimization of Dual-Purpose Power Plants and Water Distribution Networks. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 6852-6866	8.3	20
138	Environmental and economic analysis for the optimal reuse of water in a residential complex. *Journal of Cleaner Production*, **2016**, 130, 82-91	10.3	42
137	Involving economic, environmental and safety issues in the optimal purification of biobutanol. *Chemical Engineering Research and Design*, **2016**, 103, 365-376	5.5	15
136	Integrated design and control of multigeneration systems for building complexes. *Energy*, **2016**, 116, 1403-1416	7.9	24
135	Financial Risk Assessment and Optimal Planning of Biofuels Supply Chains under Uncertainty. *Bioenergy Research*, **2016**, 9, 1053-1069	3.1	23
134	Optimal Water Management under Uncertainty for Shale Gas Production. *Industrial & Engineering Chemistry Research*, **2016**, 55, 1322-1335	3.9	68
133	Optimal Synthesis of Refinery Property-Based Water Networks with Electrocoagulation Treatment Systems. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 147-158	8.3	17
132	A quantitative risk analysis for the vegetable oil industry in Mexico. *Clean Technologies and Environmental Policy*, **2016**, 18, 245-256	4.3	3
131	Optimal Design of Inherently Safer Domestic Combined Heat and Power Systems. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 188-201	8.3	16
130	Optimal Design of Distributed Algae-Based Biorefineries Using CO2 Emissions from Multiple Industrial Plants. *Industrial & Engineering Chemistry Research*, **2016**, 55, 2345-2358	3.9	21
129	Total Heat Integration in the Biobutanol Separation Process. *Industrial & Engineering Chemistry Research*, **2016**, 55, 3000-3012	3.9	10
128	Optimal design of residential cogeneration systems under uncertainty. *Computers and Chemical Engineering*, **2016**, 88, 86-102	4	25
127	Life cycle assessment for Ambrox® production from different chemical routes. *Journal of Cleaner Production*, **2016**, 130, 202-212	10.3	5
126	Optimal reconfiguration of a sugar cane industry to yield an integrated biorefinery. *Clean Technologies and Environmental Policy*, **2016**, 18, 553-562	4.3	22

125	A Mixed Integer Programming Model for Sustainable Water Management in Macroscopic Systems. *Computer Aided Chemical Engineering*, **2016**, 38, 1839-1844	0.6	
124	Optimal Reuse of Flowback Wastewater in Shale Gas Fracking Operations Considering Economic and Safety Aspects. *Computer Aided Chemical Engineering*, **2016**, 38, 943-948	0.6	5
123	Optimal Planning of Distributed Systems of Refineries and Biorefineries Considering Pollution Trading with Forest Plantations. *Computer Aided Chemical Engineering*, **2016**, 38, 1099-1104	0.6	2
122	Optimal reuse of flowback wastewater in hydraulic fracturing including seasonal and environmental constraints. *AICHE Journal*, **2016**, 62, 1634-1645	3.6	37
121	Stochastic design of biorefinery supply chains considering economic and environmental objectives. *Journal of Cleaner Production*, **2016**, 136, 224-245	10.3	53
120	Process Intensification in Heat and Mass Exchanger Networks **2016**, 65-81		
119	Optimal planning and infrastructure development for shale gas production. *Energy Conversion and Management*, **2016**, 119, 91-100	10.6	49
118	Optimization and CFD modeling of an improved rustic oven for producing bricks. *Clean Technologies and Environmental Policy*, **2016**, 18, 1599-1609	4.3	
117	Optimal Design of Integrated Solar Power Plants Accounting for the Thermal Storage System and CO2 Mitigation through an Algae System. *Industrial & Engineering Chemistry Research*, **2016**, 55, 11003-11011	3.9	2
116	Simultaneous synthesis of utility system and heat exchanger network incorporating steam condensate and boiler feedwater. *Energy*, **2016**, 113, 875-893	7.9	31
115	Industrial waste heat recovery and cogeneration involving organic Rankine cycles. *Clean Technologies and Environmental Policy*, **2015**, 17, 767-779	4.3	40
114	Optimal design and integration of solar thermal collection, storage, and dispatch with process cogeneration systems. *Chemical Engineering Science*, **2015**, 136, 158-167	4.4	16
113	A mixed-integer dynamic optimization approach for the optimal planning of distributed biorefineries. *Computers and Chemical Engineering*, **2015**, 80, 37-62	4	14
112	An optimization approach for producing carbon nanotubes involving economic and safety objectives. *Clean Technologies and Environmental Policy*, **2015**, 17, 2185-2195	4.3	2
111	Multiobjective optimization for designing and operating more sustainable water management systems for a city in Mexico. *AICHE Journal*, **2015**, 61, 2428-2446	3.6	10
110	Simultaneous design of water reusing and rainwater harvesting systems in a residential complex. *Computers and Chemical Engineering*, **2015**, 76, 104-116	4	21
109	Heat transfer analysis of a non-Newtonian fluid flowing through a circular tube with twisted tape inserts. *Applied Thermal Engineering*, **2015**, 84, 225-236	5.8	20
108	Optimal design of CHP systems for housing complexes involving weather and electric market variations. *Applied Thermal Engineering*, **2015**, 90, 895-906	5.8	17

107	Involving integrated seawater desalination-power plants in the optimal design of water distribution networks. *Resources, Conservation and Recycling*, **2015**, 104, 181-193	11.9	15
106	Multi-objective optimization of the supply chain of biofuels from residues of the tequila industry in Mexico. *Journal of Cleaner Production*, **2015**, 108, 422-441	10.3	34
105	Multiobjective Optimization Approach for Integrating Design and Control in Multicomponent Distillation Sequences. *Industrial & Engineering Chemistry Research*, **2015**, 54, 12320-12330	3.9	33
104	Optimization of facility location and reallocation in an industrial plant through a multi-annual framework accounting for economic and safety issues. *Journal of Loss Prevention in the Process Industries*, **2015**, 33, 129-139	3.5	17
103	Optimal design of macroscopic water networks under parametric uncertainty. *Journal of Cleaner Production*, **2015**, 88, 172-184	10.3	29
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101	Synthesis of optimal thermal membrane distillation networks. *AICHE Journal*, **2015**, 61, 448-463	3.6	19
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